

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (currently amended): A method of immobilizing an oligonucleotide to a solid support surface capable of interacting with the oligonucleotide, which method comprises the steps of:

complexing the oligonucleotide with a solution containing cationic detergents, said cationic detergents capable of forming a dissociable complex with the oligonucleotide,

contacting the complex formed with the solid support surface which comprises a negatively charged polymer hydrogel, said hydrogel being modified with one member of a specific binding pair, to thereby bind the oligonucleotide to the hydrogel surface through the other member of the binding pair which is conjugated to or part of the oligonucleotide,

dissociating the complex, and

removing the cationic detergents from the solid support surface to leave the oligonucleotide immobilized on the hydrogel surface;

wherein the oligonucleotide and the hydrogel solid support surface each carry a negative charge.

Claims 2-7 (cancelled)

Claim 8 (currently amended): The method according to claim 1, wherein binding of the oligonucleotide to the hydrogel surface causes at least partial dissociation of the complex.

Claims 9-12 (cancelled)

Claim 13 (previously presented): The method according to claim 1, wherein the oligonucleotide is an artificial oligonucleotide.

Claims 14-16 (cancelled)

Claim 17 (currently amended): The method of claim 1, wherein the hydrogel surface-bound member of said specific binding pair is avidin or streptavidin, and the oligonucleotide is biotin-tagged.

Claims 18-20 (cancelled)

Claim 21 (previously presented): The method according to claim 1, wherein the polymer hydrogel is covalently linked carboxymethyl-modified dextran.

Claims 22-24 (cancelled)

Claim 25 (original): The method according to claim 1, wherein the method is carried out in a flow cell.

Claim 26 (original): The method according to claim 1, wherein the solid support is a sensor surface.

Claim 27 (original): The method according to claim 26, wherein the sensor surface permits detection of events at the surface by mass-sensing.

Claim 28 (original): The method according to claim 27, wherein the mass-sensing comprises evanescent wave sensing.

Claim 29 (previously presented): The method according to claim 28, wherein the evanescent wave sensing is surface plasmon resonance.

Claims 30-44 (cancelled)

Claim 45 (currently amended): A method of immobilizing an oligonucleotide to a solid support surface capable of interacting with the oligonucleotide, which method

comprises the steps of:

complexing the oligonucleotide with a solution containing cationic detergents,  
said cationic detergents capable of forming a dissociable complex with the  
oligonucleotide,

contacting the complex formed with the solid support surface which comprises  
a negatively charged polymer hydrogel, said hydrogel containing functional groups  
capable of being activated, to thereby couple a oligonucleotide via reactive groups,  
which are part of or chemically introduced into the oligonucleotide, via a specific  
reaction with the activated functional groups,

dissociating the complex, and

removing the cationic detergents from the solid support surface to leave the  
oligonucleotide immobilized on the hydrogel-surface;  
wherein the oligonucleotide and the hydrogel-solid support surface each carry a  
negative charge.

Claim 46 (previously presented): The method according to claim 45, wherein the  
polymer hydrogel is covalently linked carboxymethyl-modified dextran

Claim 47 (previously presented): The method according to claim 46, wherein the  
carboxymethyl groups are activated to reactive groups.

Claim 48 (previously presented): The method according to claim 45, wherein the

method is carried out in a flow cell.

Claim 49 (previously presented): The method according to claim 45, wherein the solid support is a sensor surface.

Claim 50 (previously presented): The method according to claim 40, wherein the sensor surface permits detection of events at the surface by mass-sensing.

Claim 51 (previously presented): The method according to claim 50, wherein the mass-sensing comprises evanescent wave sensing.

Claim 52 (previously presented): The method according to claim 51, wherein the evanescent wave sensing is surface plasmon resonance.